

# Quantified Self (SOC 301)

An introduction to the societal implications of self tracking

Spring Quarter, 2021

## Class Schedule

Lecture: Tuesday 11:30 - 2:20  
URL: <https://canvas.uw.edu/>

## Professor

**Name:** Zack W. Almquist  
**Office:** Virtual  
**Office Hours:** By appointment  
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## Course Description

This course will focus on how apps and other online services are allowing individuals and organizations to track details of their own lives. We will cover the positive aspects of tracking, for example health and wellness tracking, as well as the negative aspects of allowing oneself to be tracked such as a lack of privacy. Real world examples include the large community of people who share results of their tracking on platforms such as reddit to help them accomplish financial (e.g. saving for a house), fitness (e.g. weight lifting), and health (e.g. weight loss) goals. Organizations and governments use this information for advertisements (e.g. real estate sales or weight loss programs), equipment (e.g. fitness trackers or heart rate monitors), policy (e.g. areas where cars should not go), etc. The course will involve weekly readings, labs and final course projects centered around generating, manipulating, and analyzing data created by the student.

## Course Objectives

- Apply data and data science methods to pose and address questions and problems that are relevant to the quantified self and large-scale voluntary tracking of the individual.
- Explain the ethical and social implications of self tracking data on society.
- Demonstrate the ability to execute the life-cycle of a project, including problem formulation, data collection or generation, data manipulation, analysis, and communication through creating through own data and synthesizing it for their final project.

## Prerequisites

A statistics course and SOC 225 Data & Society. It is ok if you do not have these prerequisites, but you may find that you need a bit more help with the R labs. Please be proactive in getting help!

## Course Requirements

### Google Documents

We will make extensive use of Google Drive and google documents. It will be very important to share your google document to me ([zalmquis@uw.edu](mailto:zalmquis@uw.edu)) to facilitate timely grading. All Google Document assignments will be submitted by generating a shared link and submitting to canvas.

To log into your UW gmail account to access it. If you have not set it up I recommend going here ([Getting Started with UW G Suite | IT Connect](#)). If you have it set up, you simply need to use the NETID SSO <http://gmail.uw.edu>.

### Class Format

Class will follow the following format:

- 1 hour Lecture
- 15 min Break
- 45 min - 1 hour Discussion
- Independent Lab study/Q&A for Lab

### Participation

Every week you will be assigned to pose a **Discussion Question (DQ)** or **First Responder (FR)** to the question. Assignments will be made in pairs such that the DQ should be provided to the FR the day before class. This will be graded 1/0 and will be for weeks 2-8.

- Your lowest Participation grade will be dropped.

In the first lecture of the quarter we will build a daily tracker (set of questions) that we will use in Lab and Lecture for the rest of the quarter. You will get full credit for this if you complete the questionnaire at least weekly (8 times). Ideally you should do it daily -- this will provide us with manual Self Tracking activity.

### Project

Everyone will complete a 15-20 minute presentation (including questions) at the end of quarter (weeks 9 and 10).

#### Project Options

- Research a topic in the area of “Quantified Self” - produce slide deck and present it on.
- Similar to labs, analyze your own data - produce a slide deck and present your analysis.

- Similar to labs, analyze data (not your own) - produce a slide deck and present your analysis.
  - [Quantified Self Data for Project Analyzing Someone Else's Data](#)

Grade for the project will consist of:

1. Select project type (week 2) [10%]
2. One paragraph description of your project (week 5) [10%]
3. Rough draft of slides (week 8) [10%]
4. Final slides and presentation (week 9 or 10; signup sheet) [70%]

## Labs

We will use R and Rstudio to gain experience with core data science tasks such as data management and analysis.

### **Weekly Lab Covers:**

1. Data pulling from an API.
2. Data management, e.g., SQL.
3. Data management and manipulation in R.
4. Data analysis and visualization in R.

Labs will be done using RStudio server. Which you can access at <http://128.95.72.79:8787/> with a username and password provided by email. Labs will be self paced with video guides and templates provided. End of class will be used for Questions and Answers for the Lab and Canvas discussion area will also be available.

- You will hand in a HTML lab file on Sunday by midnight Weeks 2-8, for a total of 7 labs.
- Your lowest lab will be dropped.

## Grading

Base Credit: 5% (Allows for Extra Credit with Canvas)  
 Participation: 35%  
 Project: 30%  
 Lab: 30%

### **Note about grading**

Lectures, readings, and labs are provided for each student's benefit. It is the responsibility of the student to take advantage of these opportunities to acquire and demonstrate mastery of course material, so as to achieve his or her desired grade.

### **Letter grade assignment**

% Points Earned	Number grade	Letter Grade
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100-97	4.0-3.9	A
96-90	3.8-3.5	A-
87-89	3.4-3.2	B+
86-84	3.1-2.9	B
83-80	2.8-2.5	B-
79-77	2.4-2.2	C+
76-74	2.1-1.9	C
73-70	1.8-1.5	C-
69-67	1.4-1.2	D+
66-64	1.1-0.9	D
63-60	0.8-0.7	D-
59-0	0	F

## Reading

### Text Books

- **[QS]** - Lupton, Deborah. The Quantified Self. PolityPress, 2016.
- **[ST]** - Neff, Gina, and Dawn Nafus. Self-tracking. MIT Press, 2016.
  - Available for free from MIT press - [Self-Tracking | Books Gateway](#)

### Articles

- **[ZA]** - Almquist, Zack W., and Carter T. Butts. "Predicting Regional Self-Identification from Spatial Network Models." *Geographical analysis* 47.1 (2015): 50-72.
- **[KC]** - Crawford, Kate, Jessa Lingel, and Tero Karppi. "Our metrics, ourselves: A hundred years of self-tracking from the weight scale to the wrist wearable device." *European Journal of Cultural Studies* 18.4-5 (2015): 479-496.
- **[KL]** - Kravitz, Richard L., et al. "Feasibility, Acceptability, and Influence of mHealth-Supported N-of-1 Trials for Enhanced Cognitive and Emotional Well-Being in US Volunteers." *Frontiers in public health* 8 (2020): 260.
- **[GW]** - Wolf, G. I., and M. De Groot. "A Conceptual Framework for Personal Science." *Front. Comput. Sci.* 2: 21 (2020).
- **[MP]** - Pantzar, Mika, and Minna Ruckenstein. "Living the metrics: Self-tracking and situated objectivity." *Digital health* 3 (2017).
- **[NYT - DDL]** Gary Wolf. The Data Driven Life. New York Times. April 28, 2010.
- **[NYT - TPA]** Natasha Singer. Technology That PRods You to Take Action, Not Just Collect Data. New York Times. April 18, 2015.

PDFs of the articles can be found: [Articles](#).

## Course Calendar

Week	DOW	Date	Holidays & Add/Drop	Lab	Participation	Project	Readings
<b>Introduction to Self Tracking</b>							
Week 1	Tue	3/30/2021		R Lab: Intro R, Stats, Visualization			<a href="#">QS: 1; ST 1</a>
<b>History of Self Tracking</b>							
Week 2	Tue	4/6/2021		R Lab: Google Sheets	Week Discussion or Response	Due Sunday @ Midnight: Project Type	<a href="#">ST: 1; KC</a>
<b>Data Science of Self Tracking: Technology and Measurement</b>							
Week 3	Tue	4/13/2021		R Lab: Google Maps and Google Location History	Week Discussion or Response		<a href="#">NYT - DDL</a> ; <a href="#">NYT - TPA</a>
<b>Data Science of Self Tracking: Making Sense of Data</b>							
Week 4	Tue	4/20/2021		R Lab: Purple Air API and Spotify API	Week Discussion or Response		<a href="#">ST 3</a>
<b>Data Science of Self Tracking: Citizen Science</b>							
Week 5	Tue	4/27/2021		R Lab: Runkeeper, Fitbit and other health trackers	Week Discussion or Response	Due Sunday @ Midnight: Project Description	<a href="#">ST: 5; ZA</a>
<b>Data Science of Self Tracking: Physiological Measures</b>							
Week 6	Tue	5/4/2021		R Lab: Runkeeper, Fitbit and other health trackers	Week Discussion or Response		<a href="#">QS: 3; ST 5</a> ; <a href="#">MP</a>
<b>Data Science of Self Tracking: Privacy, Government and Large Corporations</b>							
Week 7	Tue	5/11/2021		R Lab: Facebook, Twitter	Week Discussion or Response		<a href="#">QS: 5; ST 2</a>
<b>Data Science of Self Tracking: Online Communities</b>							
Week 8	Tue	5/18/2021		R Lab: Reddit Self Tracking Community and Text Analysis	Week Discussion or Response	Due Sunday @ Midnight: Rough Draft Slides	<a href="#">QS 4; ST 6</a>
<b>Student Presentations</b>							
Week 9	Tue	5/25/2021				Presentation in Class	
<b>Student Presentations</b>							
Week							

Week 10	Tue	6/1/2021				Presentation in Class	
Finals Week			June 4th, last day to drop				

## Datacamp

This class is supported by [DataCamp](#), the most intuitive learning platform for data science and analytics. Learn any time, anywhere and become an expert in R, Python, SQL, and more. DataCamp's learn-by-doing methodology combines short expert videos and hands-on-the-keyboard exercises to help learners retain knowledge. DataCamp offers 325+ courses by expert instructors on topics such as importing data, data visualization, and machine learning. They're constantly expanding their curriculum to keep up with the latest technology trends and to provide the best learning experience for all skill levels. Join over 5 million learners around the world and close your skills gap.

## Datacamp Recommendations

- [Programming - Part 1 \(Writing code in RStudio\)](#)
- [Introduction to R](#)
- [Intermediate R](#)
- [Introduction to the Tidyverse](#)
- [Reporting with R Markdown](#)
- [Managing - Part 1 \(Projects in RStudio\)](#)
- [Introduction to Writing Functions in R](#)
- [Introduction to Statistics in R](#) (Chapters 1-3)
- [Foundations of Probability in R](#) (Chapters 1-2)

## UW Specific R Material (Written largely for graduate students)

### Chuck's R Introduction to R for Social Scientists

- [CSSL 508 | UW CSSL508](#)

# Chris Adolph's Visualization Course

- [Chris Adolph :: Visual](#)

University of Washington Policies

## **ACCOMMODATIONS FOR RELIGIOUS ACTIVITIES**

Washington state law requires that UW develop a policy for accommodation of student absences or significant hardship due to reasons of faith or conscience, or for organized religious activities. Accommodations must be requested within the first two weeks of this course using the Religious Accommodations Request form available at: [Religious Accommodations Request Form](#)

## **DISABILITY ACCESS & ACCOMMODATIONS :**

It is the policy and practice of the University of Washington to create inclusive and accessible learning environments consistent with federal and state law. If you experience barriers based on disability, please seek a meeting with DRS to discuss and address them. If you have already established accommodations with DRS, please communicate your approved accommodations to me at your earliest convenience so we can discuss your needs in this course. Disability Resources for Students (DRS) offers resources and coordinates reasonable accommodations for students with disabilities. Reasonable accommodations are established through an interactive process between you, your instructor (me) and DRS. DRS information can be found at: [Disability Resources for Students](#).

## **SOCIOLOGY DIVERSITY STATEMENT:**

The Department of Sociology at the University of Washington values [diversity, equality, and inclusivity](#) in our community. We realize these goals in our classrooms by questioning assumptions in our texts, discussions, and our own thinking, and by holding all members of our community to the highest standards of respectful and open communication, as laid out in the [UW Student Conduct Code](#).

## **ACADEMIC INTEGRITY**

See [Student Conduct Code | Community Standards & Student Conduct](#) for crucial information regarding academic integrity. The library also has an extremely useful website with resources at [Library Guides: Academic Integrity and Plagiarism Prevention Resources: Academic Integrity & Plagiarism](#). You are responsible for knowing what constitutes a violation of the University of Washington Student Code, and you will be held responsible for any such violations whether they were intentional or not. A clear list of rules and examples of violations can be found here: [Student Academic Responsibility](#)

## **MANDATORY REPORTING STATEMENT**

\* CAUTION! Please note that we are mandatory reporters, which means that we may be required to report it to the University if you share with me experiences of past abuse or plans to harm yourself and others.

## **UW Student Resources**

## **STUDENT RESEARCH RESOURCES:**

- Libraries: [University of Washington Libraries](#)



- *Center for Statistics and the Social Sciences (CSSS)*: [Home | Center for Statistics and the Social Sciences](#)
- *Center for Social Science Computation and Research (CSSCR)*: [The Center for Social Science Computation and Research](#)
- *Center for Studies in Demography and Ecology (CSDE)*: [Computing](#)

## UW WRITING CENTERS

- *Sociology Writing Center* (open to all students enrolled in this course): SAV 203; [Sociology Writing Center](#) 206.221.0972  
Students who want to make an appointment should email [writesoc@uw.edu](mailto:writesoc@uw.edu). Students may also make appointments by calling or visiting the Advising Office.
- *Odegaard Writing and Research Center* (open to all students) : [Odegaard Undergraduate Library — UW Libraries](#). Phone 206.221.0972 and 206.543.5396.
- *Center for Undergraduate Learning and Education (CLUE)*: email [clue@uw.edu](mailto:clue@uw.edu)  
[This Week at CLUE: UW Academic Support Programs](#).

## OTHER STUDENT SUPPORT SERVICES:

### Dispute Resolution and Bias Reporting Supports

- *Office of the Ombud*: [Office of the Ombud](#) 206-543-6028
- *Bias Report* (for incidents of bias in any form): [Report Bias](#)
- *Community Standards & Student Conduct*: [Making a report | Community Standards & Student Conduct](#)
- *Title IX/ADA Coordinator* if complaint is related to disability accommodation, sex/gender discrimination, or sexual harassment (Title IX): (scroll down to bottom of page to “Grievance Procedures & Barrier Reporting”) [Policy, law and reporting | Compliance](#)

### Financial Assistance

- *Emergency Aid*: [Seattle | Emergency Aid](#)
- *Office of Student Financial Aid*: [Contact us | Student Financial Aid](#)
- *Short Term Emergency Loans*: [Short-term loans | Student Financial Aid](#)
- *Campus Food Pantry*: [Get-Food](#)
- *Housing Assistance*: [Other assistance | Student Financial Aid](#)

### Mental Health Supports

- *Health and Wellness office*: [LiveWell Center for Student Advocacy, Training, and Education](#) 206.543.6085
- *Hall Health*: <http://depts.washington.edu/hhpccweb/>
- *Hall Health Mental Health*: [Hall Health](#)
- *Counseling Center*: [About the Counseling Center | Counseling Center](#)
- *Resources Re: Sexual / Relationship Trauma*:\* [Sexual Assault Resources](#)

### Building Community

- *Office of Minority Affairs & Diversity*: [Office of Minority Affairs & Diversity](#)

- *Samuel E. Kelly Ethnic Cultural Center*: [Samuel E. Kelly Ethnic Cultural](#)
- *Q Center (for Queer community, including Questioning)*:  
[Q Center](#)
- *Intellectual House (for Indigenous community)*:  
[wələbʔaltx<sup>w</sup> – Intellectual House | Diversity at the UW](#)
- *International Student Center*: [International Student Services - International Student Services](#)
- *Deaf and Disability Cultural Center (D Center)*: HUB 327 [D Center at the University of Washington](#)
- *Undocumented Student Resources*:  
[Undocumented student resources | Admissions](#)

Technology Supports (and remote learning related supports)

- *IT Connect* (tech support services for students): [Teaching and Learning Tools](#)
- *Internet connection and free wifi hotspots* (enabled during COVID-19 outbreak) [Internet connectivity for learning, teaching and working remotely](#)
- *Laptop Loans* Remember that through the technology fees that you pay you can reserve a laptop if you need to! [Laptops for takeout or delivery: Student technology program readies for spring quarter](#)
- *Online Academic Success Coaching*: [Success Coaching: UW Academic Support Programs](#)
- *Online Study Skills Resources*: (e.g. time management) [Study Skills: UW Academic Support Programs](#)
- Video on preparing for online learning: <https://vimeo.com/4012001600>